

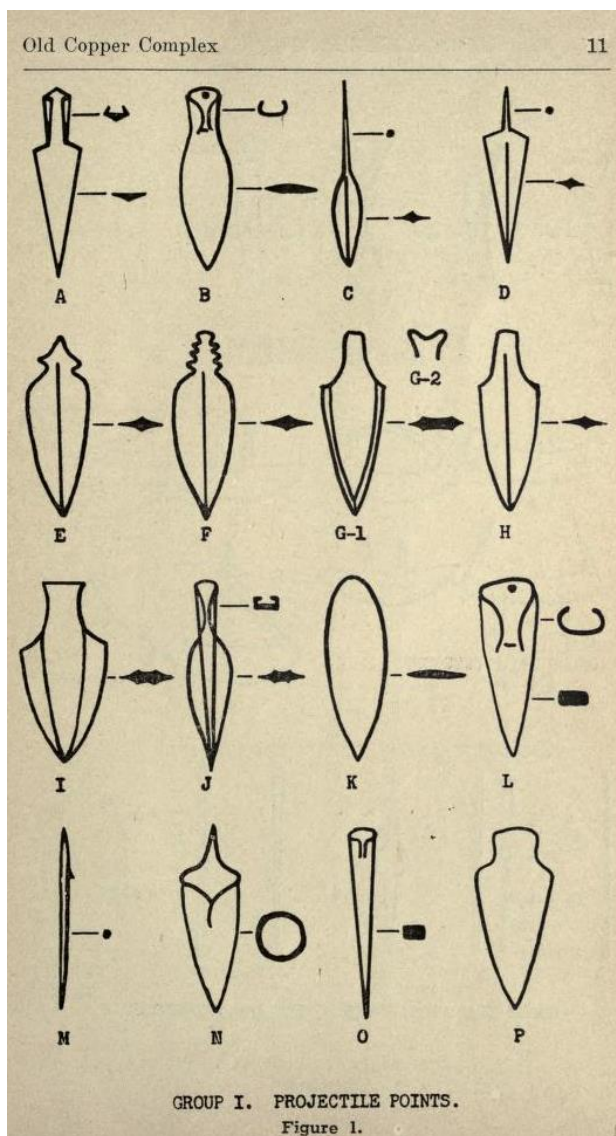
UPDATING THE WITTRY TYPOLOGY (Phase V dated 7/19/17).

Updates to Wittry's 1957 typology (*Wisconsin Archeologist*, Vol. 32 #1) with some research and with *Minnesota Archeologist's Copper Issue in 1940*. Updates to Wittry are shown in red. Note that Wittry may have used this MN on which to base his, but not all of MN's were used. Wittry referred to them all as Old Copper; see this source text for more information on his analysis.

This version includes Jack Steinbring (1975) changes to typology in blue. Those in red are adds to the Wittry types based on findings in the CAMD and in *Minnesota Archaeologist*.

By Monette Bebow-Reinhard, CAMD, www.grimmsetc.com

Type I – Points



A1 = Elongated triangular blade, 3 sided socketed stem ridge down the back, front is flat. (One dated in Oneida County 6,000 BCE, but not known who did this dating. One in MI is 3200 BCE) Also likely the one referred to as lanceolate (generally accepted as Archaic.) Note the deciding feature is the tip of the tang as pointed, not the squared shoulders of the blade. Believes 4,000-2500 BCE is accurate for these.

A2 = Includes presence of a step in the surface of front face, causing the floor of the socket to be lower than the blade, providing an abutment for the shaft (Info from Wittry Vo. 38 #4; he also notes that while A1 was found mostly in Washington & Manitowoc counties, the A2 was in Wolf and upper Fox River valleys and more limited.

B1 = Unridged socketed leaf blades, edges at socketed stem are rounded and often the socketed stem has a riveting hole. Confirmed that this is the leaf-shaped blade. Deciding feature is the rounded end of the tang, not the shoulders (info per Steinbring and Gordon Morris, 6/24/17).

B2 = Median step, no ridge, sometimes riveting hole.

B3 = Well-formed ridge and median step, often

riveting hole.

B4 = socket is barbed; Steinbring says this is Wittry's I-B3 but I see nothing in Wittry's chart that shows a third variation, or a barb in the B form. **These have been found and will be noted as this type.**

C = rat-tail point, short rounded blade with long thin and rounded stem, sometimes ridged. (Id'd as **Late Archaic in IL**) Can be ridged on both sides of the blade. **Referred to as ellipsoidal; could be nearly diamond shaped, to broad ovate. Loss of ridge indicated by shorter tang.**

D = Shorter rounded thin stemmed point with elongated triangular blade, often ridged on both sides. Can be un-ridged. Also referred to as lanceolate rat-tail. (**Good example in IL**) **Blade is elongated triangulate with short rat-tail tang, pointed and circular.**

E = ridged, single-notch "hat" tang, can be ridged on both sides, **blade is leaf-shaped**. Stem can vary in shape but is always with a single side notch on each side. **Considered Middle Archaic 6000-1500 BCE (Stoltman 1977)**

F = Ridged, sawtooth point, **leaf-shaped, generally narrower than I-E** (Id'd in IL as Hopewell and as ROC in Oneida County, Middle Woodland in IL but no photo to confirm) **At Morrison's Island site, given a date of 4700 BCE, (far earlier than ROC, which is Late Archaic).**

G1 = **elongated triangulate**, beveled flat stem triangular point; **these are sometimes decorated with hash marks.**

G2 = beveled fishtail flat stem triangular point; **refers to difference as "notch in the base" as Wittry's description. At Riverside dated 1,060 BCE and at Oconto of 5660 BCE, Steinbring argues against the dating controversy at Oconto (112).**

H = ridged flat stem triangular point, can be ridged on both sides or just one side. Unlike D, this has a thick flat stem, blade is more leaf shaped. **Extremely rare; stemmed and ridged, elongated triangular, tang has squared base.**

I = Beveled ace of spades triangular shape, flat stem (**Red ocher culture (ROC) point**); **stemmed, ridged, elongated triangular "ace of spades"** (not ridged, beveled); **red ocher associated, perhaps only used from 1500 to 500 BC.**

J = Deep bevel socketed, leaf shape point (**ROC point**); **includes under I-B; the difference is in the beveling. Can be riveted, see Oshkosh Mueller sample.**

K = cache blade point, no stem; lanceolate; stem might have broken off some; some have ridge, some have decoration; **found at Starved Rock, also known as McCreary point, dated to 4000 BCE.**

L1 = socketed with flat tip (conical with flattened tip); some are riveted. **Don Spohn shows one from central Wisconsin with a very long blade. One dated in Oneida County to 6400 BCE**

L1a = same but barbed in socket

L2 = Deep socket, socketed handle appears 'sunken' or 'stepped' (see IMG3860); depending on size, could be a chisel but would need a new type assignment.

M = Long thin barbed point, double-pointed;

N1 = barb in socket triangular point; thought to be immediately pre-ceramic; see Pickerel Lake Site (potentially ROC); could also be barbed conical.

N2 = Socketed point with barb in blade, rivet hole, blade like I-B. Probably the oldest toggling harpoon.

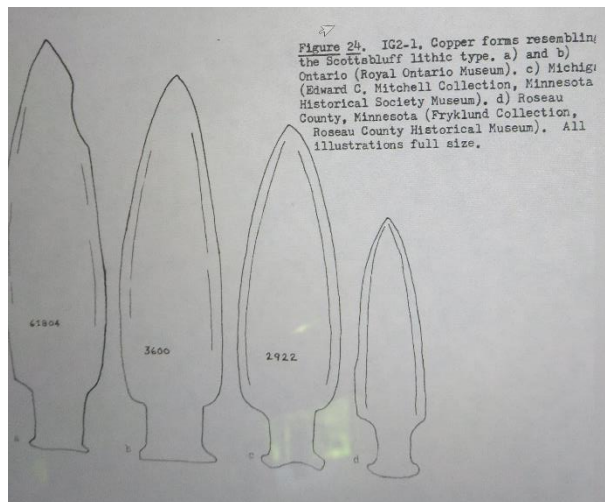
O = conical point (one dated in Oneida County to 6100 BCE).

P1 = is an arrow point, flat blade, flat wide "spalutate" tang, slightly triangular; small in size.

P2 = what's called Xmas tree point, spear point, flat blade flat wide tang, triangular; difference between these two is strictly size. Id'd in MI as Late Archaic; Steinbring gives added locations (122).

MN1 = Eye tang point, tang is flat and tapered, blade is long and leaf shaped (see Loudon's in Barron Co.)

MN2 = Spatulate tang, tang is knobbed or thicker at the end, blade has heavier shoulders than MN1



MN3 = Notched tang, the bottom of the blade, at the tang, has heavy indents or notches with knobs at other end of tang. This could be similar to what Steinbring shows as an I-G2, not always fish-tail but sometimes knobbed. Also noted in MN (see left).

MN4 = Turkey tail, this has the distinctive tang with a diamond shape at the end, most refer to it this way.

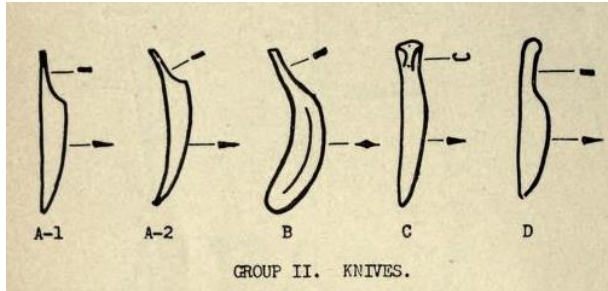
MN5 = the Half-conical or "clad" was used as a tip of a digging stick. Sometimes with small hole for riveting. This could potentially be a new ID for

some of the I-L points as well, or this is what we would call the open conical. Photo in Neubauer MN photos.

From Minnesota Archeologist "Copper Issue" 1941; the last from MN Arch 59, 2000, 129

For points and knives that have hash or tally marks: Susan Martin, Wonderful Power p. 252; connects hash marks to Reigh and Hemphill

Type II – Knives (all have some beveling)



A1 = Straight back, flat tanged; starting in Archaic, has a long use span.

A2 = Curved back, flat tanged; less use than A1

B = Ridged, curved back, squared tang; considered rare.

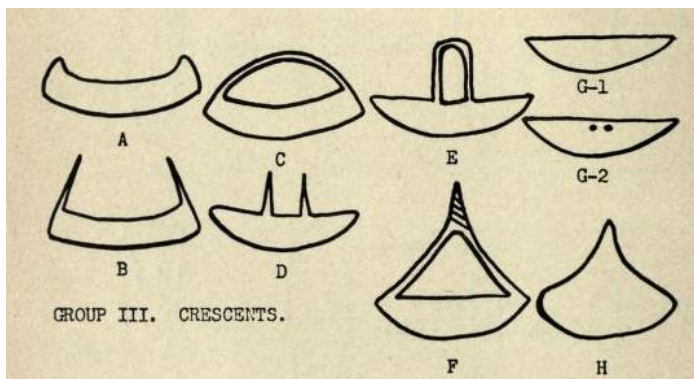
C = Socketed tang; could be riveted or not.

Steinbring agreed that this did not warrant a separate distinction; perhaps artifact was not finished.

D = Flat back, rounded blade, flared or knobbed tang (these appear more refined); sometimes has hash marks.

(all MN knife types fit above)

Type III – Crescents knives or ornaments



A1 = Canoe style, no prongs (various length ends); Steinbring notes prongs vs. no prongs; these are all no prongs.

A2 = Canoe with notch in outer center of blade edge (could be ornamental)

A3 = canoe with notched ends (could be ornamental); Steinbring also saw a lack of beveling, indicating ornamental. Potential gorget.

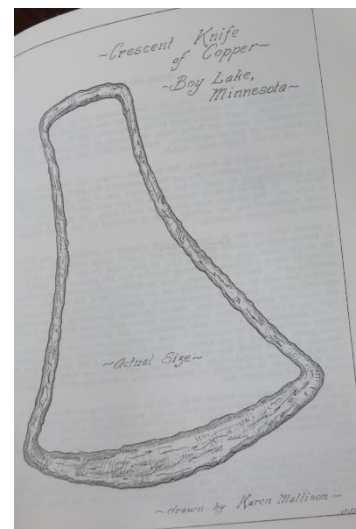
B1 = Prongs on both ends (various lengths) and in all tang varieties, such as rounded, squared, thin and stubby, and turned inward; Steinbring also believes the tang on only one end is deliberate; he shows another of curved ends (see Pickerel Lake); Overstreet identified as ROC at Milwaukee County.

B2 = High prongs up from either edge with a straight handle on top connecting the two. (see Canada & Reigh Site & Riverside)

C1 = full but short handle on top; considered rare. See WA 3-3 Plate 15, #120, from MN, and Hamilton 1209, also MN, with different curvature.

C2 = High curvy handle (see MN database and photo right).

D = two prongs up from the center, evenly spaced from either end (various lengths)



E = Prongs from D join to form a complete handle. **One found in MI with high handles, similar to MN above but prongs in the center.**

F1 = Prongs on both ends form a V in the middle, handle twisted

F2 = Prongs up from center meet to form V, not twisted

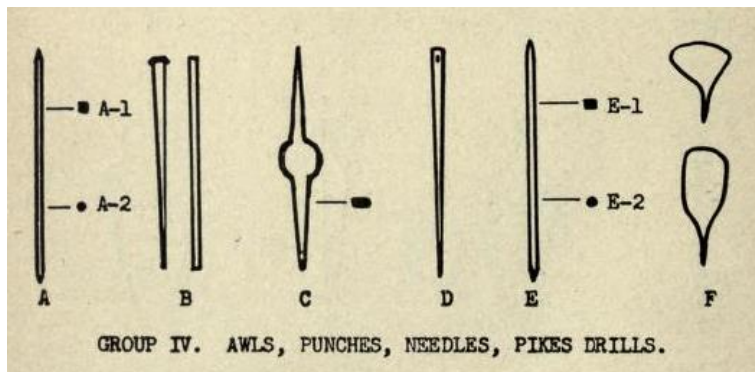
G = Ornament, some perforated, no prongs (MN shows one); **Steinbring also combines these two forms, as they are rare.**

H1 = Tumi blade shape with short stem. Completely rounded blade with crescent cutting edge and short stem is formed in the center. **(Also thought to be the style of Eskimos, Steinbring, 63)**

H2 = Same but with a long stem. Evolutionary. Seen as axe-money (t-coin) in Mexico after about 1300 CE.

I = High tangs from both ends but ends are rounded, and then the tangs form angles to straighten upright. See example in Steinbring's Figure 8 in MN.

Type IV – Awls, punches, needles, pikes, drills



A1 = squared awl, double pointed; **at Riverside, one found inserted into a wooden handle.**

A2 = round awl, double pointed

B1 = pointed awl, either squared or rounded, with other tip flattened; **probably predominately round.**

B2 = squared awl, both tips flat

(beadmaker); **often shows the effects of being hammered on.**

C = Awl with two pointed ends and bulge in middle (as in making larger holes)

D1 = Needle (hole or evidence of one on one end), **hole appears perforated; this includes broken eye types; oldest type, in Mexico around 600 CE. (photo at right)**

D2a = needle with hole that has tucked loop; newer type (1200 CE) (in photo)

D2b = needle with hole with flapped loop

E1 = Pike, squared; **Steinbring notes them at 8" or more.**

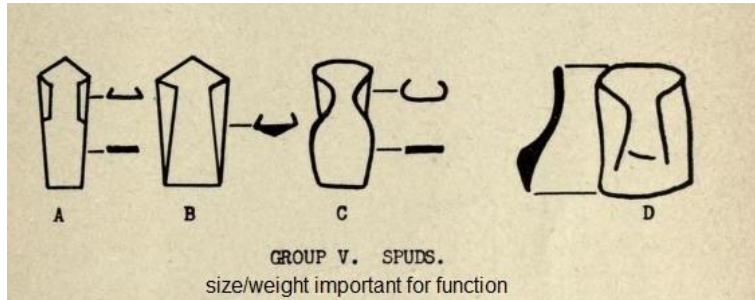
E2 = Pike – rounded



F1 = Piercers (also called punch or drill), these have a flat gripping edge with a point

F2 = Same but with ridge.

Type V – Spuds



(used for stripping bark off trees, cutting holes in ice to secure water, digging out logs and household troughs and for agriculture – per MN Arch Copper Issue (41))

A1 = Pointed, socketed near the tip only, straight on bottom half, some ridged; believes the V-A and V-B are as old as the I-A1 point.

A2 = the lower part has a 'step,' or recessed socket floor, which does not cause a protrusion on the back; V-A types are only in Wisconsin.

B1 = Full socketed, pointed; found only in Wisconsin.

B2 = full socketed, rounded (MN Arch Copper Issue)

C = socketed on top, bottom is rounded and beveled, some rounding in the socketed area

D = The most refined look with a bulge in the blade area, and is socketed (MN calls short socketed, rest are long socketed); most widely distributed type; dated to 2050 BCE.

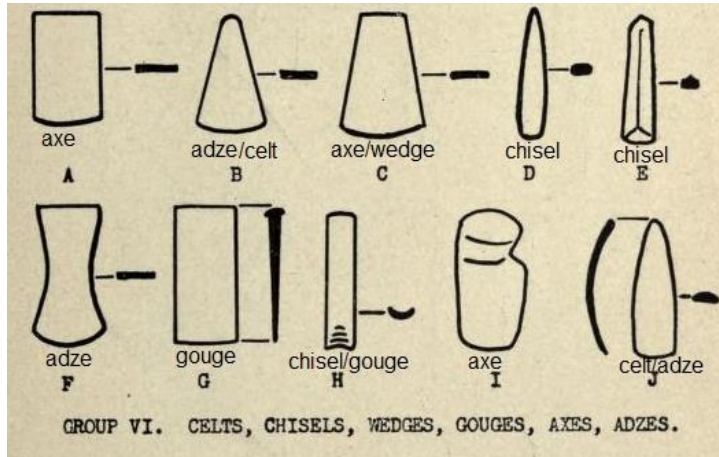
E = Long and flared, socketed, flare can be small or distinct. (MN Arch has two categories but these varieties all fit into one. I suspect VI-J (below) in Wittry could fit here.

Type VI – Celts, Chisels, Wedges, Gouges, Axes, Adzes

(updated by assigning tools to shapes, where size of tool is also a factor; changes and descriptions added from MN Arch Copper Issue)

A = squared off rectangle, axe; or extremely large wedge, unknown in Archaic context.

B1 = most often called celt, diamond shape, narrow on top edge, if thin, celt; edges often flared; tapers to rounded or flat proximal edge. Found in Archaic context at Reigh and Morrison's Island but mostly Hopewell.



B2 = same but if small is a wedge (evolutionary) – in MN Arch wedges can also be long, but then I think they're chisels. Said wedge use is splitting wood or mining (these uses would typically be smaller). Thick and heavier B2 removed and put into Archaic 'C' category.

C = Axe or wedge; is called flat blade by MN Arch (41), with parallel edges tapering toward base, cutting edge slightly convex.

C1 = Flared on thick end, straight and thicker on top end, often with hammer marks, this has also been called a celt, but is most often an **axe or wedge**; Not different enough from VI-B to be considered. Difference could be in size or weight; refer to this as Archaic, and VI-B as Hopewell/evolutionary.

C2 = End is not flared, straight edge at bevel.

D = Elongated and pointed, this is generally a **chisel or gouge**; considers it an adze.

E1 = Elongated, ridged, and pointed, also a **chisel or gouge**

E2 = Elongated, ridged and flared; chisel or gouge

F = Curved shape with an indent in the middle (bell-shaped), flared & beveled on bottom, thicker and wider at the top, cutting edge is lunar, this is rare, probably an **adze or axe**.

F2 = Same but double biting – beveled on both ends. Not common, also typical of stone.

G = Wide but thin and most often appears hammered on the top. Very rare form, probably a **scraper or gouge**; VI-A could be an unused VI-G; probable wedges.

H1 = Elongated but with a deep beveling on one end, pointed, also a **chisel**, back is rounded.

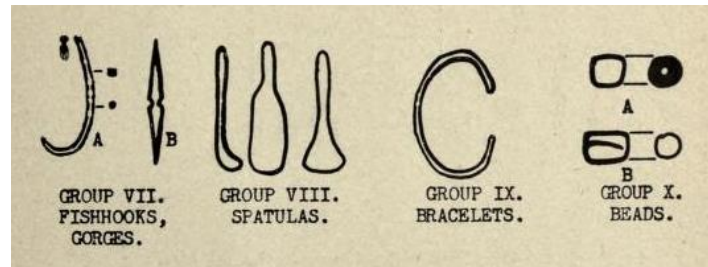
H2 = same but beveled end is squared

I = Grooved or notched (looks like stone hammerstone), irregular in shape, this is an **axe**. It's heavy on top and notched. **Rare**.

J1 = Curved celt-shaped, potentially a socketed chisel to fit in Type V but with socket worn down.

J2 = Another that might not need to be classed, this is an axe head that appears knife shaped, yet too big and without appearing to have had a handle broken off. (Canada); could be VI-A variant.

Type VII – Fish hooks and gouges



A = the typical fish hook used from Archaic times; sometimes end is grooved or thickened.

B = A gorge is bi-pointed, and notched in the middle.

C = multi-barb, looks like saw blade.

Type VIII – Spatulates (see photo above)

A variety of shapes the defy classification. Tumi knives are in crescents, as part of trade evolution similar to type 3 above, so this is eliminated here. MN ARCH calls these fish scalers, knives, scapers or pottery smoothers: flat blades with tang or handles round, square or rectangular, lower edge at least slightly sharp. Paddle or oar type more like to be used for pottery. Steinbring declines to further elaborate.

A = spoon shaped

B = oar shaped (MN shows one in Hodge collection)

Shown in Wittry photo above are three different shapes, spoon, oar and tumi

Type IX – Bracelets (see photo above)

A = thin and rounded (one is dated to 4000 BCE in Oconto)

B = thin and flattened, sometimes with decoration

C = thick and flattened, often ornate (arm band)

D = twisted

Type X – Beads (Source for following breakdown is Ann Lewis, 2003 and the CAMD); Steinbring calls these all transitional, even if found in Archaic context.

A = Barrel beads (only Hopewell); wider in middle than on either end

B = Tubular beads, also called rolled, longer and less refined (identified as ROC by Overstreet and in MI at Kimmel site.)

C = Conical (tinkling cones) (only Hopewell) (lots of modern versions, too so I'm not sure how these can be Hopewell only)

D1 = round (Hopewell or pre-Hopewell only), wider than they are long, with hole in the center, unflattened

D2, flattened, also called disk, also Hopewell or pre-Hopewell only (not Oneota)

E1 = Spiral beads

E2 = Diamond shaped beads (unusual find in Illinois), refined, likely late prehistoric.

F = Longer tubular beads, for breast plates, also called hair tubes

G = Ring or wire beads, thin and twisted shut

H = twisted (MN Arch)

Beads that that are copper plated over another material are considered Mississippian, in IL.

TYPE XI – Earspools (not in Wittry)

A = Bi-cymbal (Hopewell)

B = Pulley, hole in middle for riveting (Later Hopewell to Mississippian)

If copper covered, it's considered Mississippian.

TYPE XII – OTHER ORNAMENTS (not in Wittry)

A1 = rings (all variants);

A2 = ring-shaped, too large for rings, these are probably breastplate attachment

B = pendants, various shapes, these have a hole in center top

C = gorgets, various shapes, these have two holes in center

D = round disk shaped, often with hole in center, like for breastplate attachment

E1 = Hair pin ornaments straight with décor on top edge, slightly pointed on other edge

E2 = Hair ornaments dual pins (according to MN Arch, can be crescent shaped)

F = breastplate, larger than gorget, often with holes (MN calls plaques)

G = nose rings (dated to ROC in Oneida County, Late Archaic)